## QC ABSTRACT

**NAME OF WORK:** "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division."

| SL NO | Item Of Work | Name of Test | Frequency of Test/Quantity | Executed Quantity | Number of Tests Required | Number of Tests Conducted |
|---|---|---|---|---|---|---|
| | | **Materials** | | | | |
| 1 | Cement | Fineness by dry sieving | One Test | | 1 | 1 |
| | | Finess by Air permeablity method | One Test | | 1 | 1 |
| | | Density | One Test | | 1 | 1 |
| | | Standard Consistency | One Test | | 1 | 1 |
| | | Initial Setting time | One Test | | 1 | 1 |
| | | Final Setting time | One Test | | 1 | 1 |
| | | Soundness (Le Chatelier's Method) | One Test | | 1 | 1 |
| | | Compressive Strength | One Test | | 1 | 1 |
| 2 | Coarse aggregate(40 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| 3 | Coarse aggregate(20 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Aggregate crushing Value | One Test | | 1 | 1 |
| | | Aggregate Impact Value | One Test | | 1 | 1 |
| 4 | Fine aggregate | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Material finer than 75 micron | One Test | | 1 | 1 |
| 5 | KERB | Core Compressive strength | One Test | | 1 | 1 |
| | | Corrected Cylinder Compressive strength | One Test | | 1 | 1 |
| | | Equivalent Cube Compressive strength | One Test | | 1 | 1 |
| 6 | Precast (100mm) | Core Compressive Strength | One Test | | 1 | 1 |
| | | Corrected Cylinder Compressive Strength | One Test | | 1 | 1 |
| | | Equivalent Cube Compressive Strength | One Test | | 1 | 1 |

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## TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-22-55 **Date: 25-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| **Agency** | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-06-20 |
| **Sample Type** | : | Birla Super 53grade |
| **Reference to BIS codes** | : | IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,<br>IS 4031 (Part 1,2 3,4,5, 6,11):1988<br>IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4<br>IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5<br>IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6<br>IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5<br>IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5<br>IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6 |
| **Date of test** | : | 23-06-20 |
| **Environmental Conditions during test** | : | Temperature: 26°C<br>Humidity: 72% |

| SLNo. | Physical properties | Results | Requirement as per IS 12269: 2013 |
|---|---|---|---|
| 1 | Fineness by dry sieving (%) | 2.1 | – |
| 2 | Finess by Air permeablity method ($m^2$/kg,Min) | 284.5 | 225$m^2$/kg, Min |
| 3 | Density (gm/cc) | 3.13 | – |
| 4 | Standard Consistency (%) | 28% | Not specified |
| 5 | Initial Setting time | 155 minutes | Not less than 30 minutes |
| 6 | Final Setting time | 260 minutes | Not more than 600 minutes |
| 7 | Soundness (Le Chatelier's Method) | 2mm | Not more than 10 mm |

* The results obtained are satisfactory as per standard requirements.

**Note:**

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

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R RUDRAPRASAD
Authorized Signatory
Technical Manager


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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-22-55** **Date: 25-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| **Agency** | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-06-20 |
| **Sample Type** | : | 40mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 22-06-20 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:**

**Total weight taken** : **15000 grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 80 mm | 0 | 0 | 0.0 | 100 | 100 |
| 2 | 40 mm | 214 | 214 | 1.4 | 98.6 | 90-100 |
| 3 | 20 mm | 7254 | 7468 | 49.8 | 50.2 | 30-70 |
| 4 | 10 mm | 4442 | 11910 | 79.4 | 20.6 | 10-35 |
| 5 | 4.75 mm | 2685 | 14595 | 97.3 | 2.7 | 0-5 |
| 6 | Pan | 405 | 15000 | 100.0 | 0 | --- |

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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-22-55** **Date: 24-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| **Agency** | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| **Customer Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-06-20 |
| **Sample Type/ Size** | : | 20mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 22-06-20 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:**

**Total weight taken** : 5000 **grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 40 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 20 mm | 237 | 237 | 4.7 | 95.3 | 90-100 |
| 3 | 10 mm | 2544 | 2781 | 55.6 | 44.4 | 25-55 |
| 4 | 4.75 mm | 2107 | 4888 | 97.8 | 2.2 | 0-10 |
| 5 | Pan | 112 | 5000 | 100 | 0 | – |



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# TEST REPORT OF FINE AGGREGATE

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-22-55** **Date: 24-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| **Agency** | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-06-20 |
| **Sample Type** | : | Fine Aggregate |
| **Reference to BIS codes** | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption |
| **Date of test** | : | 22-06-20 |
| **Total weight taken** | : | 1000 grams |

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| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grading Zone I | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1 | 10 mm | 0 | 0 | 0.0 | 100.0 | 100 | 100 | 100 | 100 |
| 2 | 4.75 mm | 27 | 27 | 2.7 | 97.3 | 90-100 | 90-100 | 90-100 | 95-100 |
| 3 | 2.36 mm | 55 | 82 | 8.2 | 91.8 | 60-95 | 75-100 | 85-100 | 95-100 |
| 4 | 1.18 mm | 239 | 321 | 32.1 | 67.9 | 30-70 | 55-90 | 75-100 | 90-100 |
| 5 | 600 micron | 205 | 526 | 52.6 | 47.4 | 15-34 | 35-59 | 60-79 | 80-100 |
| 6 | 300 micron | 203 | 729 | 72.9 | 27.1 | 5-20 | 8-30 | 12-40 | 15-50 |
| 7 | 150 micron | 191 | 920 | 92.0 | 8.0 | 0-10 | 0-10 | 0-10 | 0-15 |
| 8 | Pan | 80 | 1000 | 100.0 | 0.0 | --- | --- | --- | --- |

**Result :The tested Sample Conforms to Grading Zone II**



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M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

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# TEST REPORT OF PRECAST COVER SLAB

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-22-55 **Date: 01-07-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| **Agency** | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 27-06-20 |
| **Sample Type /Size** | : | Precast Cover Slab (100mm) |
| **Reference to BIS codes** | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete |
| **Date of test** | : | 27/06/2020 |

| Sl. No. | Identification Mark | Diameter of the core | Height of the core | Weight of the core | Area | Failure Load | Core Compressive strength | Corrected Cylinder Compressive strength | Equivalent Cube Compressive strength |
|---|---|---|---|---|---|---|---|---|---|
| | | (mm) | (mm) | (kg) | (Sq.mm) | (KN) | ($N/mm^2$) | ($N/mm^2$) | ($N/mm^2$) |
| 1 | Cover Slab-1 | 75.51 | 100.48 | 1.116 | 4477 | 80.9 | 18.1 | 16.8 | 21.0 |
| 2 | Cover Slab-2 | 75.49 | 100.52 | 1.122 | 4475 | 82.3 | 18.4 | 17.1 | 21.4 |
| 3 | Cover Slab-3 | 75.50 | 100.51 | 1.118 | 4476 | 81.5 | 18.2 | 16.9 | 21.2 |

* The results obtained are satisfactory as per standard requirements.

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R RUDRAPRASAD
Authorized Signatory
Technical Manager

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# TEST REPORT OF CEMENT CONCRETE KERB STONE

Date: 03-07-20

| | | |
|---|---|---|
| Lab ID | : | CP-2020-12-22-55 |
| Customer | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| Address | : | Yelahanka Sub Division, BBMP, Bangalore. |
| Project Name | : | "Providing and Fixing Missing Kerb Stones, Covering Slabs and Desilting of Drains at Yelahanka Old Town and Surrounding Areas in Kempegowda Ward No-01 of Yelahanka Sub Division." |
| Agency | : | Sri.H.S.Prakash, No:392, 7th Main Road, ITI Layout, Nagarbhavi, 2nd Stage, Bangalore Vishwavidyalaya Bangalore-560072 |
| Customer's Reference | : | BBMP/EE/YNK.D/EPMT-01/W.O/57/2020-21 |
| Source of Sample | : | Sample supplied by Agency |
| Sample Condition | : | Satisfactory |
| Date of Receipt | : | 29-06-20 |
| Sample Type /Size | : | CC Kerb Stone/ 450*165*400mm |
| Reference to BIS codes | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete |
| Date of test | : | 29/06/2020 |

| Sl. No. | Identification Mark | Diameter of the core | Height of the core | Weight of the core | Area | Failure Load | Core Compressive strength | Corrected Cylinder Compressive strength | Equivalent Cube Compressive strength |
|---|---|---|---|---|---|---|---|---|---|
| | | (mm) | (mm) | Kg | (Sq.mm) | (KN) | (N/mm2 ) | (N/mm2 ) | (N/mm2 ) |
| 1 | A | 100.01 | 165.51 | 2.864 | 7854 | 142.1 | 18.1 | 18.1 | 22.6 |
| 2 | B | 100.03 | 165.49 | 2.793 | 7857 | 145.2 | 18.5 | 18.5 | 23.1 |
| 3 | C | 100.01 | 165.50 | 2.815 | 7854 | 145.1 | 18.5 | 18.5 | 23.1 |

* The results obtained are satisfactory as per standard requirements.

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Authorized Signatory
Technical Manager

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